ABSTRACT OF THE DISCLOSURE

In a method of manufacturing a nonvolatile semiconductor memory device having an active region constituted by a shallow trench isolation and incorporating a memory cell portion having a charge storage layer and a peripheral circuit portion of the memory cell portion, a bird's beak-shape oxide film in the upper end portion of the active region in the peripheral circuit portion is formed larger than that in the memory cell portion before the STI trench is embedded with insulators. Specifically, the memory cell portion is covered with a oxidation resisting film or oxi-nitride film before an oxidation process in which bird's beaks are introduced, or the STI trench in the peripheral circuit portion is formed in advance to form a large bird's beaks in the upper end portion of the active region in the peripheral portion. Alternatively, an oxi-nitride film is formed on the side wall of the STI in the peripheral circuit portion to prevent reduction in the insulating film on the side wall when the oxide film is etched. These features prevent a formation of a parasitic transistor in the peripheral circuit portion of a nonvolatile semiconductor memory having STI, reducing power consumption during standby.